

METROPOLITAN TRANSPORTATION COMMISSION

SERVICE AUTHORITY FOR FREEWAYS AND EXPRESSWAYS

SCOTT HAGGERTY, CHAIR
Alameda County

September 16, 2010

ADRIENNE J. TISSIER, VICE CHAIR
San Mateo County

REQUEST FOR PROPOSALS
Freeway Service Patrol Management Information Systems Annual Report FY:
2007-08, 2008-09, 2009-10 and Benefit-Cost Analysis

TOM AZUMBRADO U.S. Department of Housing and Urban Development

Dear Consultant:

TOM BATES Cities of Alameda County

DEAN J. CHU Cities of Santa Clara County

Association of Bay Area Governments

CHRIS DALY City and County of San Francisco

> BILL DODD Napa County and Cities

DORENE M. GIACOPINI U.S. Department of Transportation

FEDERAL D. GLOVER

ANNE W. HALSTED San Francisco Bay Conservation and Development Commission

> STEVE KINSEY Marin County and Cities

SUE LEMPERT Cities of San Mateo County

JAKE MACKENZIE Sonoma County and Cities

JON RUBIN San Francisco Mayor's Appointee

BUAN SARTIPI State Business, Transportation and Housing Agency

> JAMES P. SPERING Solano County and Cities

AMY REIN WORTH Cities of Contra Costa County

> KEN YEAGER Santa Clara County

> STEVE HEMINGER Executive Director

ANDREW B. FREMIER Deputy Executive Director The Metropolitan Transportation Commission Service Authority for Freeways and Expressways (MTC SAFE) invites your firm to submit a proposal to produce the following Management Information Systems (MIS) Annual Reports for FYs 2007-08, 2008-09, 2009-10 for the California Freeway Service Patrol (FSP) districts. The reports will consist of statistical reporting on FYs 2007-08, 2008-09, 2009-10, as well as a benefit-cost (B-C) analysis for FY 2009-10. The final deliverables will be as follows:

- 1.) MIS Annual Report FY 2007-08
- 2.) MIS Annual Report FY 2008-09
- 3.) MIS Annual Report FY 2009-10
- 4.) B-C Analysis FY 2009-10 models and methodology report

This is a joint project between California Department of Transportation (Caltrans) and MTC SAFE. MTC SAFE will provide a Contract Manager responsible for the administrative and financial support of the project and Caltrans will provide a Project Manager guiding the implementation of the project.

This letter together with its enclosures comprises the Request for Proposals (RFP) for this project. Responses should be submitted in accordance with the instructions set forth herein.

I. Proposal Due Date

Interested firms must submit an original and four (4) hard copies of their proposal by **4:00 p.m. on Friday, October 15, 2010. Proposals received after that date and time will not be considered.** Submitted proposals will be considered firm offers to enter into a contract and perform the work described in this RFP for a period of ninety (90) days from their submission.

II. MTC SAFE Point of Contact

Proposals and all inquiries relating to this RFP shall be submitted to the address shown below. For telephone inquiries call (510) 817-5753. E-mail inquiries may be addressed to <rzack@mtc.ca.gov>.

Rachel Zack, MTC SAFE Contract Manager Joseph P. Bort MetroCenter 101 8th Street Oakland, CA 94607-4700

JOSEPH P. BORT METROCENTER | 101 EIGHTH STREET | OAKLAND, CA 94607-4700

TEL 510.817.5700 | TTY/TDD 510.817.5769 | FAX 510.817.5848 | E-MAIL info@mtc.ca.gov | WEB www.mtc.ca.gov

III. Project Background

The Freeway Service Patrol (FSP) is an incident management program implemented by Caltrans, the California Highway Patrol and local partner agencies to quickly detect and assist disabled vehicles and reduce non-recurring congestion along the freeway during peak commute hours. FSP service is managed by 15 different local government agencies in 23 counties. Field supervision is performed by the California Highway Patrol. Program funding and oversight is done by Caltrans.

The purpose of this project is to provide a statewide Management Information Systems (MIS) Annual Report to Caltrans and FSP program partner agencies for FY 2007-08, 2008-2009, 2009-2010. The MIS Annual Report for FY 2009-2010 will include the results of a benefit-cost analysis conducted as part of this project. As there are many contributing agencies, the purpose of this project is to bring together data from all agencies and present it in a consistent format. Likewise, the final reports should be consistent in content and presentation as the Annual Reports produced in the past to enable cross-year comparisons.

Caltrans is currently in possession of the benefit-cost analysis models developed in 2007, the evaluation and predictor models (FSPE and FSPP models), and these will be provided to you. The models need to be populated with the data gathered for the database and the results calculated in the MIS Annual Report FY 2009-10. New beats need to be added, and all beats' characteristics and geometrics need to be updated. In addition, updates are needed in order to better quantify emissions reductions that result from the Freeway Service Patrol's congestion relief (see *Appendix A-1 and A-2* for more information regarding FSPE and FSPP).

IV. Scope of Work, Schedule and Budget

The workscope for this RFP is detailed in <u>Appendix A</u>, <u>Scope of Work</u>. The term of the contract will extend from January 1, 2011 to June 30, 2012. The budget for this project is \$155,000. Consultant throughout will spend 35% of the time allotted on Task 1, 15% on Task 2, 35% on Task 3, 5% on Task 4, and 10% on Task 5. MTC SAFE has allotted an additional \$45,000 for task order work.

Amounts payable after June 1, 2010 are subject to MTC SAFE's budget approval process. The contract resulting from this RFP shall be a fixed-price contract with payment based on the deliverables proposed in <u>Appendix B</u>, <u>Proposal Calculation Worksheet</u>. Task orders associated with this project will either be time and materials or deliverable based. The Task Order process and a Sample Task are attached hereto as part of <u>Appendix F</u>, <u>Task Order Process</u>, <u>Appendix F1</u>, <u>Sample Task Order</u>.

V. Addenda and Request for Exceptions

Any addenda will be posted on MTC's website. All potential bidders are responsible for checking the website for any addenda to the bid documents.

Any requests for clarification of or exceptions to RFP requirements must be received by MTC SAFE no later than 4:00 p.m. on Thursday, September 30, 2010, to guarantee response or consideration.

VI. Form of Proposal

Proposal content and completeness are most important. Clarity is essential and will be considered in assessing the proposer's capabilities. Each proposal should include:

- 1. A transmittal letter signed by an official authorized to solicit business and enter into contracts for the firm. The transmittal letter should refer to this RFP by title and date, and should include the name, telephone number and email of a contact person, if different from the signatory, and a statement that the proposal is a firm offer to enter into a contract with MTC SAFE according to the terms of this RFP for ninety (90) days following its submission;
- 2. A discussion that illustrates the Consultant's approach to be taken with respect to performing each of the tasks contained in <u>Appendix A</u>, <u>Scope of Work</u>.
- 3. A detailed statement of the Consultant's experience and qualifications relevant to providing statistical analysis and B-C modeling services as requested under this RFP. If Subconsultant's are involved in the proposal, their experience and qualifications should also be addressed.
- 4. References of at least three (3) clients other than MTC SAFE for whom the Consultant has done similar or related work in excess of \$50,000, along with the names, telephone numbers, and emails of the contact person for each reference. Out of the references submitted, MTC SAFE must be able to reach at least two to consider the qualifications of the proposer.
- 5. A price proposal that includes all costs to MTC SAFE for the required services, including but not limited to: equipment fees, material and equipment charges, and all applicable surcharges including overhead. A proposal calculation worksheet is attached to this RFP as <u>Appendix B</u>, <u>Proposal Calculation Worksheet</u>. **Proposers are required to complete and submit this worksheet as their price proposal.**
- 6. A signed California Levine Act Statement (*Appendix D*).
- 7. A signed Insurance Requirements Form (*Appendix E-1*).

VII. Evaluation Factors

The MTC SAFE Contract Manager, in consultation with the MTC Office of General Counsel, will conduct an initial review of the proposals for inclusion of the items requested in <u>Form of Proposal</u> above. Any proposal that does not include enough information to permit the evaluators to rate the proposal in any one of the evaluation factors listed below will be considered non-responsive and will not be evaluated. A proposal that fails to include one or more items requested in <u>Form of Proposal</u> may be considered complete and generally responsive, if evaluation in every criterion is possible.

Responsive proposals will be evaluated by a panel of staff representatives from MTC SAFE, based on the following evaluation factors:

• Experience and Qualifications (30%)- Evaluators will evaluate individual and team expertise and experience relevant to work specified in *Appendix A*, Scope of Work.

- Effectiveness of Proposer's approach to accomplishing the Scope of Work (30%)- Evaluators will evaluate proposer's approach to conducting and completing tasks and effectively managing and coordinating all project resources.
- Price Reasonableness (25%) Includes an evaluation of the reasonableness of the prices proposed for accomplishing the work specified in <u>Appendix A</u>, <u>Scope of Work</u> and the hourly rates of personnel, see <u>Appendix A-2</u>.
- References (15%)- Evaluators will contact references on forms, see <u>Appendix C</u>, <u>Consultant's</u> Reference Form.

Following the evaluation, the panel may elect to recommend award to a particular proposer or may hold interviews with a "short list" of proposers, prior to selection. The MTC SAFE Contract Manager will then recommend a Consultant to the Executive Director. If he agrees with the recommendation, he will request the approval of the MTC Operations Committee.

MTC SAFE reserves the right to not convene interviews and to make an award on the basis of written proposals, alone. Further, MTC SAFE reserves the right to accept or reject any and all proposals submitted, to waive minor irregularities in proposals, and to request additional information from the proposers. Any award made will be made to the firm whose proposal is the most advantageous to MTC SAFE, based on the evaluation criteria listed above.

VIII. Consultant Selection Timetable

4:00 p.m., Thursday, September 30, 2010	Closing date and time for requests for clarifications/exceptions
4:00 pm, Friday, October 8, 2010 (Five (5) working days prior to the date proposals are due)	

4:00 p.m., Friday, October 15, 2010 Closing date and time for receipt of Proposals

Friday, October 22, 2010 Interviews (if necessary)

Friday, November 12, 2010 Recommend Award to MTC Operations Committee

Monday, January 3, 2010 (approximate) Execution of Contract

IX. Selection Disputes

A proposer may object to a provision of the RFP on the grounds that it is arbitrary, biased, or unduly restrictive, or to the selection of a particular Consultant on the grounds that MTC SAFE procedures, the provisions of the RFP or applicable provisions of federal, state or local law have been violated or inaccurately or inappropriately applied by submitting to the MTC SAFE Contract Manager a written explanation of the basis for the protest:

1) No later than 4:00 pm, five (5) working days prior to the date proposals are due, for objections to RFP provisions;

- 2) No later than 4:00 pm, three (3) working days after the date on which the proposer is notified that it was found to be nonresponsive; or
- 3) No later than 4:00 pm, three (3) working days after the date on which contract award is authorized by the Operations Committee or the date Consultant is notified that it was not selected, whichever is later, for objections to Consultant selection.

Except with regard to initial determinations of non-responsiveness, the evaluation record shall remain confidential until the MTC Operations Committee authorizes award.

Protests of recommended awards must clearly and specifically describe the basis for the protest in sufficient detail for the MTC SAFE review officer to recommend a resolution to the Executive Director.

The Executive Director will respond to the protest in writing, based on the recommendation of a staff review officer. Authorization to award a contract to a particular Consultant by the MTC Operations Committee shall be deemed conditional until the expiration of the protest period or, if a protest is filed, the issuance of a written response to the protest by the Executive Director.

Should the Proposer wish to appeal the decision of the Executive Director, it may file a written appeal with the MTC Operations Committee, no later than three (3) working days after receipt of the written response from the Executive Director. The MTC Operations Committee's decision will be the final agency decision.

X. General Conditions

MTC SAFE will not reimburse any Consultant for costs related to preparing and submitting a proposal.

All materials submitted by proposers are subject to public inspection under the California Public Records Act (Government Code § 6250 *et seq.*), unless exempt.

A synopsis of MTC SAFE's contract provisions is enclosed for your reference as <u>Appendix E</u>. If a proposer wishes to propose a change to any standard MTC SAFE contract provision, the provision and the proposed alternative language must be submitted prior to the closing date for receipt of requests for clarifications/exceptions listed above. If no such change is requested, the Consultant will be deemed to accept MTC SAFE's standard contract provisions, unless such language is protested in accordance with the procedures listed above.

The selected Consultant will be required to maintain insurance coverage, during the term of the contract, at the levels described in <u>Appendix E-1</u>. Consultant agrees to provide the required certificates of insurance providing verification of the minimum insurance requirements listed in <u>Appendix E-1</u>, <u>Insurance Requirements</u>, within five (5) days of MTC's notice to firm that it is the successful proposer. Requests to change MTC SAFE's insurance requirements should be submitted on or prior to the closing date for receipt of requests for clarifications/exceptions listed above. MTC SAFE will review the requests and issue an addendum if material changes requested by a prospective proposer are acceptable. Objections to MTC SAFE determinations on requests to change insurance requirements must be brought to MTC SAFE's attention no later than the date for protesting RFP provisions listed above. If such objections are

not brought to MTC SAFE's attention consistent with the protest provisions of this RFP, compliance with all material insurance requirements will be assumed.

XI. Authority to Commit MTC SAFE

Based on the MTC SAFE's staff evaluation, the Executive Director of MTC will recommend a Consultant to the MTC Operations Committee, which will commit MTC SAFE to the expenditure of funds in connection with this RFP.

Thank you for your interest.

Very truly yours,

Steve Heminger
Executive Director

SH: RZ
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APPENDIX A SCOPE OF WORK

The Consultant should assume that a draft of this project deliverable will be submitted to the Project and Contract Managers for review and comments.

TASK 1. Data gathering and database update

Consultant will update the existing database using Access Software compatible with Access 2007. This task will include:

The collection, cleaning and assembly of the FSP-assist data (i.e. incident data on individually logged FSP-assists) listed below:

- Population
- Center Miles
- Congestion
- State Funds
- Local Funds
- Total Budget
- Total Staff
- B/C ratio
- Assists per truck hour
- Peak period assist rate
- Midday assist rate
- Weekend assist rate
- Type of assists provided
- Number and location of assists
- Number of trucks
- Average response time
- PeMS data where available
- etc.

This data is collected from Caltrans, local and regional agencies, and California Highway Patrol. While all data is available electronically, data is not in a consistent format, and will require review and cleaning.

Table 1. Example from the Statewide FSP Program Summary from 2007 Annual Report

District	Area	# of Weekday Beats	# of Weekday PM Trucks	Center - line Miles	Annual Truck Hours	Annual Total Assists ₁	Avg. Assist Duration (min.)	Assist Rate ₂	B/C Ratio ₃	State FSP Funds (\$)	% of State FSP Funds	Local Match Funds (\$)	% of Local Match Funds	CHP Allocation (\$)	% of CHP Allocation
3S/Y	Sacramento / Yolo	17	17	149	27,073	30,399	12.06	1.12	5.8	\$1,175,933	5.8%	\$635,000	3.0%	\$148,237	4.6%
3P	Placer County ³	2	2	13	1,219	1,328	12.37	1.09	#N/A	\$139,299	0.7%	\$34,825	0.2%	\$0	0.0%
4	Bay Area	36	76	479	153,303	140,255	10.59	0.91	3.6	\$4,742,695	23.4%	\$4,468,408	20.9%	\$810,517	25.3%
5SC	Santa Cruz	2	2	16	3,444	2,439	11.27	0.71	16.1	\$154,017	0.8%	\$158,000	0.7%	\$1,865	0.1%
5M	Monterey	2	2	26	3,812	4,083	12.03	1.07	2.2	\$172,757	0.9%	\$65,100	0.3%	\$0	0.0%
5SB	Santa Barbara ⁴	3	2	20	1,014	596	#N/A	0.59	#N/A	\$210,913	1.0%	\$52,729	0.2%	\$0	0.0%
6	Fresno	3	3	21	3,375	1,807	19.26	0.54	1.6	\$237,600	1.2%	\$59,400	0.3%	\$0	0.0%
7	Los Angeles	41	144	451	390,019	316,450	14.83	0.81	6.3	\$6,507,907	32.1%	\$13,120,195	61.2%	\$1,114,704	34.8%
8R	Riverside	15	13	43	23,529	35,125	9.67	1.49	17.1	\$1,175,933	5.8%	\$293,983	1.4%	\$201,548	6.3%
8SB	San Bernardino ⁵	4	8	34	6,854	12,193	8.30	1.78	#N/A	\$980,348	4.8%	\$245,087	1.1%	\$167,842	5.2%
10	San Joaquin	1	3	16	6,610	4,599	12.10	0.70	4.6	\$343,805	1.7%	\$85,951	0.4%	\$0	0.0%
11	San Diego	13	25	225	56,250	49,972	10.24	0.89	6.4	\$2,258,856	11.2%	\$564,715	2.6%	\$386,931	12.1%
12	Orange	12	32	168	70,168	70,649	9.80	1.01	8.7	\$2,151,235	10.6%	\$1,644,752	7.7%	\$368,358	11.5%
	State-wide	151	329	1,661	746,670	669,895	#N/A	0.90	6.3	\$20,251,298	100,0%	\$21,428,145	100,0%	\$3,200,001	100,0%

Notes: (1) Assist Rate = Total Assists divided by Total Truck Hours.

- (2) B/C Ratios were calculated for the Fiscal Year 2004-2005 Weekday Beats.
- (3) Placer County Service started on January 3, 2006. Truck hours and Assists statistics are for 6 months (Jan-Jun 2006).
- (4) San Barbara Service started on March, 2006. Truck hours and Assist statistics are for 4 months (Mar-Jun 2006).
- (5) San Bernardino Service started on January 3, 2006. Truck hours and Assists statistics are for 6 months (Jan-Jun 2006).
- Data collection summary statistics for Caltrans fiscal years 2007-08, 2008-09, 2009-10.
- Create summary statistics by FSP Beat and by Caltrans District in a format compatible with the FSP evaluation and predictor model (e.g. Table 1).

• Prepare the Draft MIS Annual Report FYs 2007-08, 2008-09, 2009-10 in a format consistent with past Annual Reports. ¹

DELIVERABLE 1.1: Copy of the updated statewide database including all formatting required for analyzing the above listed data points. This may consist of place holders for anticipated charts, and minimal text.

DELIVERABLE 1.2: Basic outline of the MIS Annual Report. This may consist of place holders for anticipated charts, and minimal text.

TASK 2. Update of Models

Caltrans will provide the Consultant with the B-C models developed for the FY 2006-07.² The Consultant will update and improve upon the models, adding an emissions reduction calculation. Using the model provided, the Consultant will:

- Calculate new default FSPE and FSPP (i.e. incident) parameters based on the FY: 2009-2010 beat evaluation data. See Table 2 for the FSPE default parameter table (on the INPUT page of the FSPE model). Examples of FSPE and FSPP model parameters to be updated include:
 - Average FSP-assist duration by incident-type (District average and state-wide averages).
 - Expected FSP-assist distributions (proportion of total incidents by incident-type categories).
- Update all cost inputs (e.g. delay costs, fuel costs, etc.).

Table 2: Incident Characteristics Table on FSPE's INPUT page

	ent Characteristics Assists (Inc/yr)	; 	
Incident		# Incidents	Mean time
Type/Locat	tion	or (%)	spent (min)
Accident	Right Shoulder	7.91%	15.29
	Lt Shldr (Median)	1.34%	19.08
	1-Lane	4.90%	24.14
Breakdowr	n Right Shoulder	73.51%	14.01
	Lt Shldr (Median)	4.33%	17.58
	1-Lane	4.15%	18.41
Debris	Right Shoulder	0.55%	7.55
	Lt Shldr (Median)	0.13%	16.45
	1-Lane	3.18%	9.96

- Re-estimate FSP-assist predictor model (the internal predictor model built into the FSPP model) based upon the FY: 2009-10 incident data.
- Incorporate fuel and emissions reductions (PM, NOx, ROGs, CO2, CH4, N2O, and CO2e).
- Update model document methodology and user guide.³

¹ Reports can be viewed on the web at www.fsp-bayarea.org, under "Annual Report Information."

² Previous reports can be viewed on the web at www.fsp-bayarea.org, under "Annual Report Information."

DELIVERABLE 2.1: Updated parameters for the FSPP and FSPE models and the incorporation of an emissions reduction calculator

DELIVERABLE 2.2: Two copies of the B-C analysis methodology and model overview (in Mircosoft Word and pdf format). The Consultant will also present the methodology to MTC and Caltrans staff where s/he will receive feedback.

TASK 3. Freeway Service Patrol Evaluation

The Consultant will perform statistical analysis of the data collected in Task 1 for FY 2007-08, 2008-09, 2009-10, as well as a B-C analysis of FY 2009-10. Using the data collected in Task 1, the Consultant must:

- Perform statistical analysis on the statewide program and display using tables, graphs and charts.
- Perform statistical analysis aggregated by district and display using tables, graphs and charts.⁴
- Perform B-C analysis for FY 2009-10.

Using data from Task 1 and the updated models from Task 2, the Consultant will:

- Incorporate feedback from Task 2.
- Update Beat's geometric and traffic volume data
- Run the FSPE and FSPP models using the parameters developed in Task 2 (See Appendices A-1 and A-2).
- Conduct evaluations (estimate the benefit/cost ratio) for all existing FSP Beats using the FY: 2009-2010 FSP-assist data, geometrics, and traffic volumes obtained from PeMS⁵ (where available), else from published Caltrans traffic counts for:
 - Existing beats with weekday FSP service
 - Existing beats with weekend FSP service
- Prepare District and State-wide summary statistics and FSP Beat Evaluation Summary Report.

DELIVERABLE 3.1: Complete the statistical evaluation of the data collected for FY 2008, 2009, and 2010. Work will be demonstrated by a draft report of FY 2009-10 which includes the results of the B-C analysis. This draft will act as a template for the final FY 2007-08, and 2008-09 reports, although they will not include a B-C analysis section, and should reflect the layout of previous reports. Provide one electronic copy and two hard copies of the FY 2009-10 MIS Annual Report draft and anticipate feedback.

³ Previous model document methodology and user guide can be viewed on the web at www.fsp-bayarea.org, under "Annual Report Information."

⁴ Previous reports can be viewed on the web at www.fsp-bayarea.org, under "Annual Report Information."

⁵ It is expected that CONSULTANT will use PeMS actual hourly counts for days of FSP service at each segment on each beat to capture time of day differences.

TASK 4. Final Report

Prepare 3 MIS Annual Reports for FY 2007-08, 2008-09, 2009-10, as well as incorporate the FY 2009-10 B-C analysis results in the FY 2009-10 MIS Annual Report. The report should include:

- Text introducing the FSP project's history, purpose, geographical explanation of the beats and the maps necessary to aid the reader.
- Charts, graphs and tables from Task 3 displayed in a logical manner.
- A benefit-cost analysis that includes a description of the research methodology, data sources, input assumptions, findings from the evaluation of the FSP beats.
- Recommendations for possible improvements to the FSP program.
- Findings of the B-C analysis in the FY 2009-10 MIS Annual Report.

DELIVERABLE 4.1: One electronic and three hard copied packets of the final three MIS Annual reports and a presentation on the findings.

TASK 5. Workshops and Technical Support

Provide technical assistance to FSP managers and staff at Caltrans Districts and local agencies responsible for managing the FSP programs at the District level, including:

- Assist districts with analyzing newly proposed Beats, i.e. assisting with determining appropriate input parameters and data for the predictor model:
 - Run FSP predictor mode (insuring consistency between Districts)

MTC SAFE will conduct workshops to present the study findings and provide training on the application of the models.

- Conduct one user workshop for Caltrans and local agency staff to present the study methodology, the updated FSPE and FSPP models, and findings from the evaluation of existing FSP beats
- Conduct user training workshops (one in Northern California and one in Southern California) to provide users with hands-on experience on the application of the FSPE and FSPP models:
 - Data collection procedures (e.g. using PeMS to obtain traffic volumes, traffic profiles)
 - Using the predictor model to evaluate potential Beats and comparing potential Beats
 - Using the models' "Run-time Options"
 - Reliability of the FSP Beat evaluation and predictor models

DELIVERABLE 5.1: Conduct one user workshop explaining the methodology and MIS findings.

DELIVERABLE 5.2: Two user training workshops that demonstrate how to use the model.

TASK 6. Task Order Assignments

This task may include other assistance related to the Freeway Service Patrol Management Information System Annual Report to be determined by MTC SAFE at a future date, including, but not limited to, the following:

- On-going local agency training and support for local agencies that need technical assistance running the benefit-cost model or need detailed data collection instructions
- Develop and implement a method of quantifying benefits that the California Highway Patrol receives by having FSP in the field
- Other task to be determined

APPENDIX A-1 OVERVIEW OF THE FREEWAY SERVICE PATROL EVALUATION (FSPE) MODEL

The FSP beat evaluation (FSPE) model estimates FSP response time and response time reductions, incident delays, and delay savings. The model handles multiple time periods (including all day service) with different number of FSP tow trucks per time period. The FSPE model was extensively tested and applied to all existing FSP beats statewide.

The FSPE model was implemented in a *Microsoft Excel* workbook using Visual Basic for Applications (VBA) routines in the workbook itself and in a *Microsoft Excel* Add-in file (named "FSPE_v12.xla"). It is assumed that users have a basic knowledge of the *Excel* software for entering and editing input data and the model parameters, and for saving and printing the workbook's worksheets. From the user's perspective, the FSPE model consists of the following six worksheets:

INPUT: Beat input data (beat, traffic, and incident data) for the FSP beat to be

analyzed.

RESULTS: Individual time period, daily, and annual savings of the MOEs (delay,

fuel, emissions) and the benefit/cost (B/C) ratio.

PARAMS: The default model parameters; may be modified by the user if more

representative (i.e. locally obtained empirical) parameter estimates are

available.

FIELDDATA: This worksheet is optional. It may be used by the user to input segment

specific hourly traffic volumes, capacities, and/or FSP-assists, if

detailed segment specific data are available.

TRAFFIC-PROFILES: Caltrans' District average (time-of-day) traffic profiles for Weekday,

Saturday, and Sunday FSP beat analysis (used by the FSP models).

DIR-FACTORS: Time-of-day traffic directionality profiles (used by the FSP models).

Additional information regarding the FSPE model can be found online at www.fsp-bayarea.org.

APPENDIX A-2

FSP PREDICTOR MODEL AND APPLICATIONS

The FSP predictor (FSPP) model predicts the cost effectiveness (i.e. the Benefit/Cost ratio) of providing freeway service patrol (FSP) on freeway sections that currently do not have FSP service, and it can assist in predicting the impacts of operational changes on existing beats (e.g., additional service hours, weekend service). When run, the FSPP model first estimates the number of FSP-assists based on the prospective beat's design and traffic characteristics and the assumed FSP service, and then calculates the B/C ratio using the same methodology as in the FSPE model. Note: The FSP evaluation (FSPE) model should be used to evaluate the effectiveness of existing beats where the number of annual FSP-assists is known (i.e. empirically obtainable). The FSP predictor model should be used when the number of FSP-assists is not known (i.e. cannot be counted) because currently there is no FSP service on the beat to be evaluated.

The FSPP model methodology consists of the following steps:

- The user inputs three types of information for the proposed FSP beat:
 - O Design and traffic characteristics: the beat length, number of lanes per each uniform segment of the beat, the average daily traffic (AADT), and the peaking and directionality factors for the period of analysis (am, midday, pm)
 - Information on the proposed FSP service: (hours of operation, number of trucks, number of service days per year, cost (\$/ truck-hr), and whether is a weekday, Saturday or Sunday service.
 - o **Information on incident characteristics:** proportion of incidents that occur inlane, or on the left and right shoulders; traffic accidents, vehicle breakdowns, and debris removals, along with the average time spent (average FSP-assist duration) for each of these categories. If these data are not known, then the FSP statewide averages should be used unless more reliable incident statistics are available.
- The model calculates the traffic volumes per time period of analysis for each beat segment based on the AADT, the D-factor and whether the service is provided for weekdays, Saturdays or Sundays.
- The model predicts the total number of FSP-assists based on the proposed FSP service and the proposed beat characteristics (e.g. beat length, freeway geometry, and the traffic volumes) on the beat during the proposed hours of FSP service.
- The model distributes the incidents by type on each beat segments and calculates the delay per incident with and without FSP service (and the delay savings) using the *FSPE*'s queuing model.
- The model calculates the FSP costs based on the inputs on the service characteristics. It converts the delay savings into benefits and calculates the B/C ratio for the proposed FSP service.

As with the FSP evaluation model, the predictor allows the user to change several of the default model parameters to better match local conditions. The FSPP model is embedded into the FSPE workbook as a menu option, with calculation routines written in Visual Basic for Applications. It is assumed that users have a basic knowledge of the *Excel* software in entering/editing data and saving/printing the spreadsheet.

Additional information regarding the FSPP model can be found online at www.fsp-bayarea.org.

APPENDIX B PROPOSAL CALCULATION WORKSHEET

Please submit your price proposal on this worksheet. Prices proposed shall be for accomplishing the work specified in <u>Appendix A</u>, <u>Scope of Work</u>, and shall include all labor, materials, equipment, and all applicable surcharges including, but not limited to, taxes, overhead, and profit. Prices proposed shall be effective for the period of June 1, 2010 through June 30, 2012.

Task	Deliverables		Cost	Expected Timeline**
1. Data gathering & database	1. Copy of update	ed database		January-May
update	2. Basic outline of	of MIS Annual Report		
2. Update of Models	reductions in e 4. Written overvi	l parameters and calculate missions and fuel consumption. ew of models (2 copies, 1 presentation of methodology		May
3. Freeway Service Patrol Evaluation	electronic copy Annual Report the final report	a draft (2 hard copies and 1 y) of the FY 2009-10 MIS demonstrating the template for s upon completion of the ysis and the B-C analysis.		January-July
4. Final Report	6. Completed rep	ort (3 copies)		August
5. Workshops and	7. Workshop on 1	methodology and findings		September- October
Technical Support	8. Workshops der model (2 work	monstrating how to use the kshops)		
6. Task Orders	As Assigned	Hourly rate	\$45,000	Undetermined
Total Project C	ost:			

^{*} Deliverable will be authorized for payment upon the satisfaction of the MTC SAFE Contract and the Caltrans Project Manager.

^{**}Expected timeline is meant as a guide for determining the workload of each task. The dates are subject to change based on the Consultant's input and the final start date of the contract.

APPENDIX C CONSULTANT's Reference Form

Name of Bidding Company
Representative Name & Title
Phone Number

Please provide three (3) or more separate references of clients with contracts of \$50,000 or greater in the last three (3) years. References will be contacted during the week of November 1st. References must not be relatives of the Consultant's representatives or owners. It is the Consultant's responsibility to provide reliable and responsive references. Only the three (3) references listed below will be contacted. MTC SAFE Contract Manager must be able to reach two (2) of the references submitted to assess the qualifications of the proposer.

	sary): Client's Name
•	Contact Person
	Address
	City & Zip Code
	Phone Number & Email
	Type of Work Performed
	Contract Amount \$
•	Client's Name
	Contact Person
	Address
	City & Zip Code
	Phone Number & Email
	Type of Work Performed
	Contract Amount \$
,	Client's Name
	Contact Person
	Address
	City & Zip Code
	Phone Number & Email
	Type of Work Performed
	Contract Amount \$

APPENDIX D CALIFORNIA LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than \$250 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

MTC's commissioners include: Tom Azumbrado Dorene M. Giacopini Jon Rubin Tom Bates Federal D. Glover Bijan Sartipi Dave Cortese Scott Haggerty James P. Spering Anne W. Halsted Dean J. Chu Adrienne J. Tissier Amy Rein Worth Chris Daly Steve Kinsey Bill Dodd Sue Lempert Ken Yeager

Jake Mackenzie

1.		any agent on behalf of you or your company, made any political to any MTC commissioner in the 12 months preceding the date of the ifications?
	YES NO If yes, please identify the comm	issioner:
2.		y agency on behalf of you or your company, anticipate or plan to make any han \$250 to any MTC commissioners in the three months following the
	YES NO If yes, please identify the comm	issioner:
	however, preclude the identified	tions above does not preclude MTC from awarding a contract to your firm. I commissioner(s) from participating in the contract award process for this
	DATE	(SIGNATURE OF AUTHORIZED OFFICIAL)
		(TYPE OR WRITE APPROPRIATE NAME, TITLE)

(TYPE OR WRITE NAME OF COMPANY)

APPENDIX E

SYNOPSIS OF PROVISIONS IN MTC SAFE'S STANDARD CONSULTANT AGREEMENT

The selected CONSULTANT will be required to sign MTC SAFE standard CONSULTANT agreement, a copy of which standard agreement may be obtained from the Contract Manager for this RFP. In order to provide bidders with an understanding of some of MTC SAFE standard contract provisions, the following is a synopsis of the major requirements in our standard agreement for professional services. THE ACTUAL LANGUAGE OF THE STANDARD CONSULTANT AGREEMENT SUPERSEDES THIS SYNOPSIS.

<u>Termination</u>: MTC may, at any time, terminate the Agreement upon written notice to CONSULTANT. Upon termination, MTC SAFE will reimburse the CONSULTANT for its costs for incomplete deliverables up to the date of termination. Upon payment, MTC SAFE will be under no further obligation to the CONSULTANT. If the CONSULTANT fails to perform as specified in the agreement, MTC SAFE may terminate the agreement for default by written notice following a period of cure, and the CONSULTANT is then entitled only to compensation for costs incurred for work products acceptable to MTC SAFE, less the costs to MTC SAFE of rebidding.

Insurance Requirement: See *Appendix E-1, Insurance Requirements*, attached hereto.

<u>Independent CONSULTANT</u>: CONSULTANT is an independent CONSULTANT and has no authority to contract or enter into any other agreement in the name of MTC SAFE. CONSULTANT shall be fully responsible for all matters relating to payment of its employees including compliance with taxes.

<u>Indemnification</u>: CONSULTANT agrees to defend, indemnify and hold MTC SAFE harmless from all claims, damages, liability, and expenses resulting from any negligent or otherwise wrongful act or omission of CONSULTANT in connection with the agreement. CONSULTANT agrees to defend any and all claims, lawsuits or other legal proceedings brought against MTC SAFE arising out of such negligent or wrongful acts or omissions. The CONSULTANT shall pay the full cost of the defense and any resulting judgments.

<u>Data Furnished by MTC SAFE</u>: All data, reports, surveys, studies, drawings, software (object or source code), electronic databases, and any other information, documents or materials ("MTC SAFE Data") made available to the CONSULTANT by MTC SAFE for use by the CONSULTANT in the performance of its services under this Agreement shall remain the property of MTC SAFE and shall be returned to MTC SAFE at the completion or termination of this Agreement. No license to such MTC SAFE Data, outside of the Scope of Work of the Project, is conferred or implied by the CONSULTANT's use or possession of such MTC SAFE Data. Any updates, revisions, additions or enhancements to such MTC SAFE Data made by the CONSULTANT in the context of the Project shall be the property of MTC SAFE.

Ownership of Work Product: All data, reports, surveys, studies, drawings, software (object or source code), electronic databases, and any other information, documents or materials ("Work Product") written or produced by the CONSULTANT under this Agreement and provided to MTC SAFE as a deliverable

shall be the property of MTC SAFE. CONSULTANT will be required to assign all rights in copyright to such Work Product to MTC SAFE.

<u>Personnel and Level of Effort</u>: Personnel assigned to this Project and the estimated number of hours to be supplied by each will be specified in an attachment to the Agreement. No substitution of personnel or substantial decrease of hours will be allowed without prior written approval of MTC SAFE.

<u>Subcontracts</u>: No subcontracting of any or all of the services to be provided by CONSULTANT shall be allowed without prior written approval of MTC SAFE. MTC SAFE is under no obligation to any sub CONSULTANTs.

<u>CONSULTANT's Records</u>: CONSULTANT shall keep complete and accurate books, records, accounts and any and all work products, materials, and other data relevant to its performance under this Agreement. All such records shall be available to MTC SAFE for inspection and auditing purposes. The records shall be retained by CONSULTANT for a period of not less than four (4) years following the fiscal year of the last expenditure under this Agreement.

<u>Prohibited Interest</u>: No member, officer or employee of MTC SAFE can have any interest in this agreement or its proceeds and CONSULTANT may not have any interest which conflicts with its performance under this Agreement.

Governing Law. The Agreement shall be governed by the laws of the State of California.

APPENDIX E-1 - INSURANCE REQUIREMENTS

Minimum Insurance Coverages. CONSULTANT shall, at its own expense, obtain and maintain in effect at all times the following types of insurance against claims, damages and losses due to injuries to persons or damage to property or other losses that may arise in connection with the performance of work under this Agreement, placed with insurers with a Best's rating of A-X or better.

Yes (√)	Please certify by checking the boxes at left that required coverages will be provided within five (5) days of MTC's notice to firm that it is the successful proposer.
	Workers' Compensation Insurance in the amount required by the applicable laws, and Employer's Liability insurance with a limit of not less than \$1,000,000 per employee and \$1,000,000 per occurrence, and any and all other coverage of CONSULTANT's employees as may be required by applicable law. Such policy shall contain a Waiver of Subrogation endorsement in favor of MTC. Such Workers Compensation & Employers Liability may be waived, if and only for as long as CONSULTANT is a sole proprietor with no employees.
	Commercial General Liability Insurance for Bodily Injury and Property Damage liability, covering the operations of CONSULTANT and CONSULTANT's officers, agents, and employees and with limits of liability which shall not be less than \$1,000,000 combined single limit per occurrence with a general aggregate liability of not less than \$2,000,000, and Personal & Advertising Injury liability with a limit of not less than \$1,000,000. Expense for Indemnitee's defense costs shall be outside of policy limits and such policy shall be issued on a Duty to Defend Primary Occurrence Form.
	MTC, and its commissioners, officers, representatives, agents and employees are to be named as additional insureds. Such insurance as afforded by this endorsement shall be primary as respects any claims, losses or liability arising directly or indirectly from CONSULTANT's operations.
	<u>Umbrella Insurance</u> in the amount of \$5,000,000 providing excess limits over Employer's Liability, Automobile Liability, and Commercial General Liability Insurance.
	Errors and Omissions Professional Liability Insurance in an amount no less than \$2,000,000. If such policy is written on a "Claims-Made" (rather than an "occurrence") basis, CONSULTANT agrees to maintain continuous coverage in effect from the date of the commencement of services to at least three (3) years beyond the termination or completion of services or until expiration of any applicable statute of limitations, whichever is longer. The policy shall provide coverage for all work performed by the CONSULTANT and any work performed or conducted by any Subcontractor/Consultant working for or performing services on behalf of the CONSULTANT. No contract or agreement between the CONSULTANT and any Subcontractor/Consultant shall relieve the

CONSULTANT of the responsibility for providing this Errors & Omissions or Professional Liability coverage for all work performed by the CONSULTANT and any Subcontractor/Consultant working on behalf of the CONSULTANT on the project.

Property Insurance covering CONSULTANT'S own business personal property and equipment to be used in performance of this Agreement, materials or property to be purchased and/or installed on behalf of MTC (if any), debris removal, and builders risk for property in the course of construction (if applicable). Coverage shall be written on a "Special Form" ("All Risk") that includes theft, but excludes earthquake, with limits at least equal to the replacement cost of the property. Such policy shall contain a Waiver of Subrogation in favor of MTC. If such insurance coverage has a deductible, the CONSULTANT shall also be liable for the deductible.

Deductibles: Any deductibles or self-insurance retentions over \$100,000 are subject to the approval of MTC SAFE.

Notice of Termination: All Contractor policies shall provide that the insurance carrier shall give written notice to MTC SAFE at least 60 days prior to cancellation, non-renewal or material change of coverage in the policy or policies, and shall provide notice of such change to MTC SAFE and any other additional insured.

Additional Provisions: Each policy or policies of insurance described in <u>Commercial General Liability Insurance</u>, above shall contain the following provisions:

Inclusion of MTC SAFE, its directors, Commissioners, officers, representatives, agents and employees, as additional insured's with respect to work or operations in connection with this Agreement.

Endorsement providing that such insurance is primary insurance and no insurance of MTC SAFE will be called on to contribute to a loss.

Certificates of Insurance: Promptly on execution of this Agreement and prior to commencement of any work hereunder, Contractor shall deliver to MTC SAFE Certificates of Insurance verifying the aforementioned coverages. Such certificates shall make reference to all provisions and endorsements referred to above and shall be signed on behalf of the insurer by an authorized representative thereof. Contractor agrees, upon written request by MTC SAFE, to furnish copies of such policies or endorsements required under the Agreement prior to the Effective Date of the Agreement.

Disclaimer: The foregoing requirements as to the types of limits of insurance coverage to be maintained by Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Contractor pursuant hereto, including, but not limited to, liability assumed pursuant to <u>Appendix D</u>, <u>Indemnification</u>.

Subcontractor's Insurance: Contractor shall require each of its subcontractors to provide the aforementioned coverages, unless such coverages are waived or reduced in writing by the MTC SAFE Project Manager.

By signing below, you acknowledge and agree to provide the required certificate of insurance providing verification of the minimum insurance requirements listed above within five (5) days of MTC SAFE's notice to firm that it is the successful proposer.					
Representative Name and Title					
Name of Authorizing Official					
Authorized Signature					
Date					

NOTE: If you were unable to check "Yes" for any of the required minimum insurance coverages listed above, a request for exception to the appropriate insurance requirement(s) must be brought to MTC SAFE's attention no later than the date for protesting RFP provisions. If such objections are not brought to MTC SAFE's attention consistent with the protest provisions of this RFP, compliance with the insurance requirements will be assumed.

APPENDIX F TASK ORDER PROCESS

Task Orders will be numbered sequentially. The period of performance shall be as set forth in the individual Task Order.

The process for developing, signing and tracking task orders is summarized as follows:

- Step 1* The MTC SAFE Project Manager (PM), or designee, prepares a draft Task Order to issue to CONSULTANT. The PM may solicit feedback from CONSULTANT to facilitate drafting the Task Order.
- Step 2* CONSULTANT prepares a proposal in response to the draft Task Order. The proposal should follow the Task Order Form format specified herein.
- Step 3* The MTC SAFE PM reviews CONSULTANT's proposal to determine if it meets the objectives of the draft Task Order and if CONSULTANT's proposed costs are reasonable. The PM may solicit early feedback from MTC SAFE senior management at this time, if necessary. Any changes to the draft Task Order deemed appropriate by MTC SAFE shall be incorporated in a draft Final Task Order.
- Step 4* The MTC SAFE PM forwards the draft Final Task Order to the MTC SAFE Contract Administrator for review and approval.
- Step 5* Once approved, the MTC SAFE PM forwards two copies of the Task Order to the MTC SAFE Programming and Allocations Director for review and approval.
- Step 6* The MTC SAFE Director signs both copies of a Final Task Order to signify approval and returns them to the MTC SAFE PM.
- Step 7* The MTC SAFE PM sends both copies of the signed Final Task Order to CONSULTANT, who signs both copies and returns one to the MTC SAFE PM.
- Step 8* The MTC SAFE PM sends one copy of the fully executed Task Order to the MTC SAFE Task Lead who initiates work, and sends another copy to MTC SAFE Accounting to encumber funds against the Task Order. The MTC SAFE PM keeps the original fully-executed Task Order for the official project record.
- Step 9* The MTC SAFE PM is responsible for overseeing the successful conclusion of the Task Order, and will manage the progress of the work, track invoices against the Task Order budget, and track milestone completion against the Task Order schedule.
- Step 10* Once the MTC SAFE PM determines the Task Order is complete, the MTC SAFE PM will send written notification to CONSULTANT that the Task Order is complete and that all associated invoices are due to MTC SAFE within 30 days. Any balance of budget is made available to spend on future task orders at the MTC SAFE PM's discretion.
- Step 11*— The MTC SAFE PM will annually assess the need for a Contract audit.

 *The MTC SAFE Project Manager may revise the Task Order and/or CONSULTANT may be asked to revise the proposal based on feedback received during Steps 2 through 6.

APPENDIX F-1, SAMPLE TASK ORDER

1. Task Order No. (include FY)	Examp	le: 1-	11; 2-11		
2. Title of Task:					
3. MTC SAFE Task Lead (if different from					
MTC SAFE Project Manager):					
4. Description of work:	Summa	rize l	key task exp	ectations. Fo	or more
-				d Task Order	
	Schedu	le an	d Detailed I	Description of	f Work
	(attache			*	
5. Original Maximum Payment:					
6. Amended Maximum Payment:					n payment, by
		nent	number, for	particular fis	scal year.
7. Completion Date:	Date Schedu	le att	ached.		
8. Payment terms:			e & Materia	ls	
			verables		
9. DBE Participation, if any (firm name and S		Den	verables		
amount):	P				
10. DBE Participation to date this fiscal year:	:				
(\$ amount and % of Agreement maximum					
payment):					
7. Payment Terms					
A. Time and Materials					
7					
A. Time and Materials Name/Position	Est. Hrs		Hrly Rate	Total Cost*	
7	Est. Hrs		Hrly Rate	Total Cost*	\$1
Name/Position	Est. Hrs		Hrly Rate	Total Cost*	\$1 \$1
Name/Position 1.	Est. Hrs		Hrly Rate	Total Cost*	
Name/Position 1. 2.			Hrly Rate	Total Cost*	\$1
Name/Position 1. 2. Total:			Hrly Rate	Total Cost*	\$1
Name/Position 1. 2. Total: *Due upon satisfactory completion as determined by the MTC SAFE I			Hrly Rate	Total Cost*	\$1 \$2.00
Name/Position 1. 2.			Hrly Rate	Total Cost*	\$1 \$2.00
Name/Position 1. 2. Total: *Due upon satisfactory completion as determined by the MTC SAFE IB. Deliverables-based. Deliverable 1.			Hrly Rate	Total Cost*	\$1 \$2.00 <i>Total Cost*</i> \$1
Name/Position 1. 2.			Hrly Rate		\$1 \$2.00 <i>Total Cost*</i> \$1 \$1
Name/Position 1. 2.	Project Manager.		Hrly Rate	Total Cost*	\$1 \$2.00 <i>Total Cost*</i> \$1
Name/Position 1. 2. Total: *Due upon satisfactory completion as determined by the MTC SAFE IB. Deliverables-based. Deliverable 1.	Project Manager. Manager.	DMPA	Hrly Rate	Total:	\$1 \$2.00 <i>Total Cost*</i> \$1 \$1
Name/Position 1. 2. Total: *Due upon satisfactory completion as determined by the MTC SAFE I B. Deliverables-based. Deliverable 1. 2. *Due upon satisfactory completion as determined by the MTC Project	Project Manager. Manager.	OMPA		Total:	\$1 \$2.00 <i>Total Cost*</i> \$1 \$1
Name/Position 1. 2.	Project Manager. Manager.	DMP#		Total:	\$1 \$2.00 <i>Total Cost*</i> \$1 \$1
Name/Position 1. 2. *Due upon satisfactory completion as determined by the MTC SAFE I B. Deliverables-based. Deliverable 1. 2. *Due upon satisfactory completion as determined by the MTC Project METROPOLITAN TRANSPORTATION COMMISSION	Project Manager. Manager. CO		ANY NAME	Total:	\$1 \$2.00 <i>Total Cost*</i> \$1 \$1
Name/Position 1. 2.	Project Manager. Manager. CO	natoi		Total:	\$1 \$2.00 <i>Total Cost*</i> \$1 \$1